

AMENDMENTS TO THE CLAIMS

1-16. (Cancelled)

17. (Currently Amended) A process for producing a catalyst component for addition polymerization, which ~~consists essentially of~~ comprises the step of contacting (a) triphenyl bismuth, (b) pentafluorophenol and (c) silica the following (a), (b) and (c):

~~(a) a compound represented by the formula {1};~~



~~(b) a compound represented by the formula {2};~~



~~(c) a particle;~~

wherein  $m$  is a numeral corresponding to the valence of Bi;  $L^k$  is a hydrogen atom, a halogen atom, a hydrocarbon group or a hydrocarbon-oxy group, and when more than one  $L^k$  exist, they may be the same as or different from one another;  $R^+$  is an electron-withdrawing group or an electron-withdrawing group-containing group, and when more than one  $R^+$  exist, they may be the same as or different from one another; T represents a non-metal atom of Group 15 or 16 of the periodic table;  $t$  is a numeral corresponding to the valence of T; and  $n$  is an integer of 1 to  $t$  excluding 2.

18-20. (Cancelled)

21. (Previously Presented) A process for producing a catalyst for addition polymerization, which comprises the steps of:

- producing a catalyst component for addition polymerization by the process according to claim 17; and
- contacting the catalyst component for addition polymerization with a transition metal compound (B) of Groups 3 to 11 or lanthanide series.

22. (Previously Presented) The process for producing a catalyst for addition polymerization according to claim 21, wherein the transition metal compound (B) of the Groups 3 to 11 or lanthanide series is a metallocene compound.

23. (Previously Presented) A process for producing a catalyst for addition polymerization, which comprises the steps of:

- producing a catalyst component for addition polymerization by the process according to claim 17; and
- contacting the catalyst component for addition polymerization with a transition metal compound (B) of Groups 3 to 11 or lanthanide series and an organoaluminum compound (C).

24. (Previously Presented) The process for producing a catalyst for addition polymerization according to claim 23, wherein the transition metal compound (B) of the Groups 3 to 11 or lanthanide series is a metallocene compound.

25. (Previously Presented) A process for producing an addition polymer, which comprises the step of polymerizing an addition polymerizable monomer with a catalyst for addition polymerization produced by the process according to claim 21.

26. (Previously Presented) The process for producing an addition polymer according to Claim 25, wherein the addition polymerizable monomer is an olefin.

27. (Previously Presented) The process for producing an addition polymer according to Claim 25, wherein the addition polymerizable monomer is a mixture of ethylene with an  $\alpha$ -olefin.

28. (Previously Presented) A process for producing an addition polymer, which comprises the step of polymerizing an addition polymerizable monomer with a catalyst for addition polymerization produced by the process according to claim 23.

29. (Previously Presented) The process for producing an addition polymer according to Claim 28, wherein the addition polymerizable monomer is an olefin.

30. (Previously Presented) The process for producing an addition polymer according to Claim 28, wherein the addition polymerizable monomer is a mixture of ethylene with an  $\alpha$ -olefin.